polypeptides comprises a tetranectin trimerising structural element (TTSE), said TTSE being a polypeptide having at least 68% amino acid sequence identity with the consensus sequence shown in Fig. 2, and (ii) at least one of said monomer polypeptides is covalently linked to at least one heterologous moiety.

69 (new). The trimeric polypeptide complex according to claim 68, wherein the sequence identity with the consensus sequence is at least 75%.

70 (new). The trimeric polypeptide complex according to claim 68, wherein the sequence identity with the consensus sequence is at least 81%.

71 (new). The trimeric polypeptide complex according to claim 68, wherein the sequence identity with the consensus sequence is at least 87%.

72 (new). The trimeric polypeptide complex according to claim 68, wherein the sequence identity with the consensus sequence is at least 92%.

73 (new). The trimeric polypeptide complex according to claim 68, wherein the TTSE comprises the consensus sequence shown in Figure 2.

74 (new). The trimeric polypeptide complex according to claim 1, wherein the TTSE is derived from human tetranectin, murine tetranectin, C-type lectin of bovine cartilage, or C-type lectin of shark cartilage.

75 (new). The trimeric polypeptide complex according to claim 74, wherein the TTSE is derived from human tetranectin and comprises the amino acid residues V17 to V49 (exon 2) shown in Figure 1.

76 (new). The trimeric polypeptide complex according to claim 75, wherein the TTSE derived from human tetranectin further comprises the amino acid residues C50 to K52 (exon 3) shown in Figure 1.

77 (new). The trimeric polypeptide complex according to claim 68, wherein the monomer polypeptides further comprises the amino acid residues E1 to D16 (exon 1) shown in Figure 1.

78 (new). The trimeric polypeptide complex according to claim 75, wherein at least one amino acid residue of exon 2 selected from the group consisting of amino acid residue nos. 21, 22, 24, 25, 27, 28, 31, 32, 35, 39, 41, 42, is/are substituted by any non-helix breaking amino acid residue, the amino acid residue numbering referring to amino acid residues in SEQ ID NO: 7.

79 (new). The trimeric polypeptide complex according to claim 77, wherein amino acid residue no. 6 of exon 1 is substituted by any non-helix breaking amino acid residue, the amino acid residue numbering referring to amino acid residues in SEQ ID NO: 7.

80 (new). The trimeric polypeptide complex according to claim 68, wherein the TTSE comprises a repeated heptad having the formula a-b-c-d-e-f-g (N to C), wherein a majority of the amino acids residues a and d are hydrophobic amino acids.

81 (new). The trimeric polypeptide complex according to claim 80, wherein the heptad is repeated 3 times and wherein the amino acid residues located at sequence positions a and d of the third occurrence of the heptad repeat are glutamine residues.

82 (new). The trimeric polypeptide complex according to claim 68 which is stable in the temperature range 50-70°C.

83 (new). The trimeric polypeptide complex according to claim 68, comprising at least 2, 3, 4, 5 or 6 heterologous moieties.

84 (new). The trimeric polypeptide complex according to claim 68, wherein the at least one heterologous moiety is selected from the group consisting of a ligand binding structure; a toxin; a detectable label; an in situ activatable substance; an enzyme; a radioactive moiety; a cytokine; a non-proteinaceous polymer such as a polymeric alkaloid, a polyalcohol, a polysaccharide, a lipid and a polyamine; a photo cross-linking agent; and a group facilitating conjugation of the polypeptide to a target.

85 (new). The trimeric polypeptide complex according to

claim 68, wherein said at least one heterologous moiety is positioned C-terminally to the monomer polypeptide.

86 (new). The trimeric polypeptide complex according to claim 68, wherein said at least one heterologous moiety is positioned N-terminally to the monomer polypeptide.

87 (new). The trimeric polypeptide complex according to claim 68, which comprises at least one heterologous moiety which is positioned N-terminally to the monomer polypeptide and at least one heterologous moiety which is positioned C-terminally to the monomer polypeptide.

88 (new). The trimeric polypeptide complex according to claim 68, wherein the at least one heterologous moiety is covalently linked to the monomer polypeptide via a peptide bond to the - or C-terminus of the monomer polypeptide chain, via a peptide bond to a side chain in the monomer polypeptide, via a bond to a cysteine residue, or when more than one heterologous moiety, combinations of these locations.

89 (new). The trimeric polypeptide complex according to claim 68 which lacks any free amino and/or carboxy groups.

90 (new). A method for preparing a trimeric polypeptide complex which comprises (i) admixing three monomer polypeptides according to claim 68, (ii) effecting complex formation between said monomer polypeptides, and (iii) isolating the resulting trimeric polypeptide complex and optionally subjecting the polypeptide complex to further processing.

91 (new). A kit comprising the trimeric polypeptide complex according to claim 68.

92 (new). A method for targeted gene therapy involving selective delivery of a material for transfection or infection of a specific population of cells, comprising the use of a trimeric polypeptide complex according to claim 68.

93 (new). The method for targeted gene therapy according to claim 92 wherein the at least one heterologous moiety comprises a moiety selected from a ligand binding structure such as a receptor molecule or the ligand binding part of a receptor

molecule, and wherein the gene therapy involves the delivery of nucleic acids to the desired population of cells by use of a viral vector directed to cells displaying the artificial receptor complex corresponding to the heterologous moiety.

94 (new). A chimeric product comprising a trimeric polypeptide complex according to claim 68, said product having low antigenicity in humans relative to formulations comprising one or more components of non-human origin.

95 (new). In a method of assembling antibody fragments into oligomeric or multivalent entities for generating chimeric artificial antibodies having preselected pharmacokinetic and/or pharmadynamic properties the improvement which comprises use of a trimeric polypeptide complex according to claim 68 as a vehicle.

96 (new). In a method for delivering an imaging or toxin-conjugated antibody to a tumor the improvement which comprises use of a trimeric polypeptide complex according to claim 68.

97 (new). In a method of delivering a substance to a target cell or tissue, the improvement which comprises use of a conjugate of said substance and a trimeric polypeptide complex according to claim 68.

98 (new). A composition comprising a trimeric polypeptide complex according to claim 68.

99 (new). A composition according to claim 98 wherein the trimeric polypeptide complex is comprised in a liposome.

100 (new). A method for treating or preventing of a disease comprising administering to a subject in need thereof a therapeutically or prophylactically effective amount of a pharmaceutically acceptable composition comprising a trimeric polypeptide complex according to claim 68.

101 (new). The method according to claim 100 wherein the composition is administered by a route selected from the group consisting of the intravenous route, the intraarterial route, the transmembraneus route of the buccal, anal og vaginal tissue, intranasal route, the pulmonary route, the transdermal route,